

Adult Immunization Update, 2013, and the National Influenza/Adult Summit

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Disease Control and Prevention

North Carolina Vaccine Circus:
“Juggling the Complexity of Immunizations”

August 1, 2013

National Center for Immunization & Respiratory Diseases

Place Descriptor Here



Objectives

- Identify changes contained in the 2013 CDC Adult Immunization Schedule
 - Tdap
 - Influenza
 - Pneumococcal
 - HPV
 - Zoster
- Vaccine Coverage among Adults
- Present update on National Influenza/Adult Summit

Disclosures

- No financial conflict or interest with the manufacturer of any product named during this presentation.
- Will present recommendations for
 - tetanus-toxoid, diphtheria-toxoid, acellular pertussis (Tdap) vaccine and
 - pneumococcal conjugate vaccine (PCV13) in a manner that conflicts with the product information

FIGURE 1. Recommended adult immunization schedule, by vaccine and age group¹

These recommendations must be read with the footnotes that follow.

VACCINE ▼	AGE GROUP ▶	19-21 years	22-26 years	27-49 years	50-59 years	60-64 years	≥ 65 years
Influenza ^{2,3}		1 dose annually					
Tetanus, diphtheria, pertussis (Td/Tdap) ^{1,4*}		Substitute 1-time dose of Tdap for Td booster; then boost with Td every 10 yrs					
Varicella ^{1,5*}		2 doses					
Human papillomavirus (HPV) Female ^{1,6*}		3 doses					
Human papillomavirus (HPV) Male ^{1,6*}		3 doses					
Zoster ⁶		1 dose					
Measles, mumps, rubella (MMR) ^{7,8*}		1 or 2 doses					
Pneumococcal polysaccharide (PPSV23) ^{9,10}		1 or 2 doses					
Pneumococcal 13-valent conjugate (PCV13) ¹⁰		1 dose					
Meningococcal ^{11,12*}		1 or more doses					
Hepatitis A ^{13,14*}		2 doses					
Hepatitis B ^{15,16*}		3 doses					

*Covered by the Vaccine Injury Compensation Program

For all persons in this category who meet the age requirements and who lack documentation of vaccination or have no evidence of previous infection, zoster vaccine recommended regardless of prior episode of zoster

Recommended if some other risk factor is present (e.g., on the basis of medical, occupational, lifestyle, or other indication)

No recommendation

Report all clinically significant postvaccination reactions to the Vaccine Adverse Event Reporting System (VAERS). Reporting forms and instructions for filing a VAERS report are available at www.vaers.hhs.gov or by telephone, 800-822-7967. Information on how to file a Vaccine Injury Compensation Program claim is available at www.hrsa.gov/vaccinecompensation or by telephone, 800-338-2382. To file a claim for vaccine injury, contact the U.S. Court of Federal Claims, 717 Madison Place, N.W., Washington, D.C. 20005; telephone, 202-357-6400. Additional information about the vaccines in this schedule, extent of available data, and contraindications for vaccination is also available at www.cdc.gov/vaccines or from the CDC-INFO Contact Center at 800-CDC-INFO (800-232-4636) in English and Spanish, 8:00 a.m. - 8:00 p.m. Eastern Time, Monday - Friday, excluding holidays. Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

The recommendations in this schedule were approved by the Centers for Disease Control and Prevention's (CDC) Advisory Committee on Immunization Practices (ACIP), the American Academy of Family Physicians (AAFP), the American College of Physicians (ACP), American College of Obstetricians and Gynecologists (ACOG) and American College of Nurse-Midwives (ACNM).

FIGURE 2. Recommended vaccinations indicated for adults based on medical and other indications¹

VACCINE ▼	INDICATION ▶	Pregnancy	Immunocompromising conditions (excluding human immunodeficiency virus [HIV]) ^{14,17,18,19}	HIV infection (CD4+ T lymphocyte count) ^{14,17,18,19}	Men who have sex with men (MSM) ¹⁴	Heart disease, chronic lung disease, chronic alcoholism	Asplenia (including elective splenectomy and persistent complement component deficiencies) ^{16,14}	Chronic liver disease	Kidney failure, end-stage renal disease, receipt of hemodialysis	Diabetes	Healthcare personnel
Influenza ^{2,3}				<200 cells/μL	≥200 cells/μL						
Tetanus, diphtheria, pertussis (Td/Tdap) ^{1,4*}											
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Varicella ^{5,6*}		2 doses					
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Zoster ⁶		1 dose					
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FIGURE 2. Recommended vaccinations indicated for adults based on medical and other indications¹

VACCINE ▼	INDICATION ▶	Pregnancy	Immunocompromising conditions (excluding human immunodeficiency virus [HIV]) ^{17,18,19}	HIV infection (CD4+ T lymphocyte count) ^{18,19,20,21}	Men who have sex with men (MSM) ²²	Heart disease, chronic lung disease, chronic alcoholism	Asplenia (including elective splenectomy and persistent complement component deficiencies) ^{23,24}	Chronic liver disease	Kidney failure, end-stage renal disease, receipt of hemodialysis	Diabetes	Healthcare personnel
Influenza ^{2,3}				<200 cells/μL	≥200 cells/μL						
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Adult Tdap Recommendations

Administer Tdap to unvaccinated adults 19 years and older including:

Adults over 65 years of age*

If possible, Boostrix should be used for adults 65 years of age and older

Administer Adacel* if Boostrix is not available

*Off-label recommendation. MMWR 2011; 60 (No.41):1);1424-1426

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Varicella ^{1,5*}		2 doses					
Human papillomavirus (HPV) Female ^{1,6*}		3 doses					
Human papillomavirus (HPV) Male ^{1,6*}		3 doses					
Zoster ⁶						1 dose	
Measles, mumps, rubella (MMR) ^{7,8*}		1 or 2 doses					
Pneumococcal polysaccharide (PPSV23) ⁹			1 or 2 doses				1 dose
Pneumococcal 13-valent conjugate (PCV13) ¹⁰				1 dose			
Meningococcal ^{11,*}		1 or more doses					
Hepatitis A ^{12,*}		2 doses					
Hepatitis B ^{13,*}		3 doses					

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VACCINE ▼	INDICATION ▶	Immunocompromising conditions (excluding human immunodeficiency virus [HIV]) ^{14,15,16,17}	HIV infection (CD4+ T lymphocyte count) ^{18,19,20,21}	Men who have sex with men (MSM) ²²	Heart disease, chronic lung disease, chronic alcoholism ²³	Asplenia (including elective splenectomy and persistent complement component deficiencies) ^{24,25}	Chronic liver disease ²⁶	Kidney failure, end-stage renal disease, receipt of hemodialysis ²⁷	Diabetes ²⁸	Healthcare personnel ²⁹
Influenza ^{2,3}	Pregnancy	1 dose IV annually	<200 cells/μL	≥200 cells/μL	1 dose IV or 1 dose annually	1 dose IV annually				1 dose IV or 1 dose annually
Tetanus, diphtheria, pertussis (Td/Tdap) ^{1,4*}	1 dose (Tdap preferred)	Substitute 1-time dose of Tdap for Td booster; then boost with Td every 10 yrs								
Varicella ^{1,5*}	Contraindicated					2 doses				
Human papillomavirus (HPV) Female ^{1,6*}		3 doses through age 26 yrs				3 doses through age 26 yrs				
Human papillomavirus (HPV) Male ^{1,6*}		3 doses through age 26 yrs				3 doses through age 21 yrs				
Zoster ⁶	Contraindicated					1 dose				
Measles, mumps, rubella (MMR) ^{7,8*}	Contraindicated					1 or 2 doses				
Pneumococcal polysaccharide (PPSV23) ⁹					1 or 2 doses					
Pneumococcal 13-valent conjugate (PCV13) ¹⁰					1 dose					
Meningococcal ^{11,*}					1 or more doses					
Hepatitis A ^{12,*}					2 doses					
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Tdap in Pregnancy



Tdap-naïve Women and Pregnancy

- Providers of care to pregnant women should recommend Tdap to their patients after 20 weeks gestation
- This strategy is preferred to cocooning, but if Tdap cannot be given in pregnancy it can be given in postpartum period (once)

Pregnancy and Repeat Tdap Doses

- Pregnant women should receive Tdap with each pregnancy
- Ideal time is 27-36 weeks gestation

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Influenza ^{1,2}		1 dose annually					
Tetanus, diphtheria, pertussis (Td/Tdap) ^{1,*}		Substitute 1-time dose of Tdap for Td booster; then boost with Td every 10 yrs					
Varicella ^{4,*}		2 doses					
Human papillomavirus (HPV) Female ^{5,*}		3 doses					
Human papillomavirus (HPV) Male ^{5,*}		3 doses					
Zoster ⁶						1 dose	
Measles, mumps, rubella (MMR) ^{7,*}		1 or 2 doses					
Pneumococcal polysaccharide (PPSV23) ⁸				1 or 2 doses			1 dose
Pneumococcal 13-valent conjugate (PCV13) ⁹					1 dose		
Meningococcal ^{10,*}				1 or more doses			
Hepatitis A ^{11,*}				2 doses			
Hepatitis B ^{11,*}				3 doses			

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FIGURE 2. Recommended vaccinations indicated for adults based on medical and other indications¹

VACCINE ▼	INDICATION ►	Pregnancy	Immunocompromising conditions (excluding human immunodeficiency virus [HIV]) ^{1,6,7,10,15}	HIV infection CD4+ T lymphocyte count ^{6,7,10,15}	Men who have sex with men (MSM) ¹⁵	Heart disease, chronic lung disease, chronic alcoholism	Asplenia (including elective splenectomy and persistent complement deficiencies) ^{10,14}	Unlabeled live diseases	Kidney failure, end-stage renal disease, receipt of hemodialysis	Diabetes	Healthcare personnel
Influenza ^{1,2}			1 dose IIV annually	200 cells/μl	≥ 200 cells/μl	1 dose IV or IIV annually		1 dose IIV annually			1 dose IV or IIV annually
Tetanus, diphtheria, pertussis (Td/Tdap) ^{1,*}		1 dose IIV annually	Substitute 1-time dose of Tdap for Td booster; then boost with Td every 10 yrs								
Varicella ^{4,*}		Contraindicated						2 doses			
Human papillomavirus (HPV) Female ^{5,*}			3 doses through age 26 yrs					3 doses through age 26 yrs			
Human papillomavirus (HPV) Male ^{5,*}			3 doses through age 26 yrs					3 doses through age 21 yrs			
Zoster ⁶		Contraindicated						1 dose			
Measles, mumps, rubella (MMR) ^{7,*}		Contraindicated						1 or 2 doses			
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Influenza Vaccine



Influenza Vaccination Recommendation

- Annual influenza vaccination is now recommended for every person in the United States 6 months of age and older
- ACIP has not expressed preference for any particular influenza vaccine for any population

MMWR 2010;59(RR-8)

Influenza Vaccine Presentations 2012-2013

Vaccine	Doseform	Age
<u>Fluzone IIV</u> <u>(sanofi pasteur)*</u>	SDS, SDV, MDV #	6 months and older
<u>Fluarix IIV*</u> FluLaval IIV (GSK)	SDS MDV	3 years and older 18 years and older
Fluvirin IIV Flucelvax IIV (Novartis)	SDS, MDV	4 years and older 18 years and older
Afluria IIV (CSL)	SDS	9 years and older
Flublok IIV (Protein Sciences Corp.)	SDV	18-49 years
<u>Flumist LAIV*</u> <u>(MedImmune – only available</u> <u>as 4-valent vaccine)</u>	Nasal spray	2-49 years (healthy, nonpregnant)

* Available with 3 or 4 influenza virus strains; 4-valent includes 2 B strains

SDS=single dose syringe; SDV=single dose vial; MDV=multidose vial

Influenza Vaccine strains for the 2013-14 Season

- WHO*: Feb 23, 2013 recommendations for Northern Hemisphere's 2013-2014 influenza vaccine to contain:
 - an A/California/7/2009 (H1N1)-like virus;
 - A/Victoria/361/2011(H3N2)-like virus
 - B/Massachusetts/2/2012-like virus NEW
 - For quadrivalent vaccines: add B/Brisbane/60/2008-like virus
- FDA (VRBPAC): Feb 27, 2012 agreed with recommendation

*http://www.who.int/influenza/vaccines/virus/recommendations/2013_14_north/en/index.html

Influenza Vaccine

- ❑ **CDC's preference for choice of influenza vaccine is driven primarily by the age indication for the particular product**
- ❑ **Important for pre-booking**

H7N9 Influenza

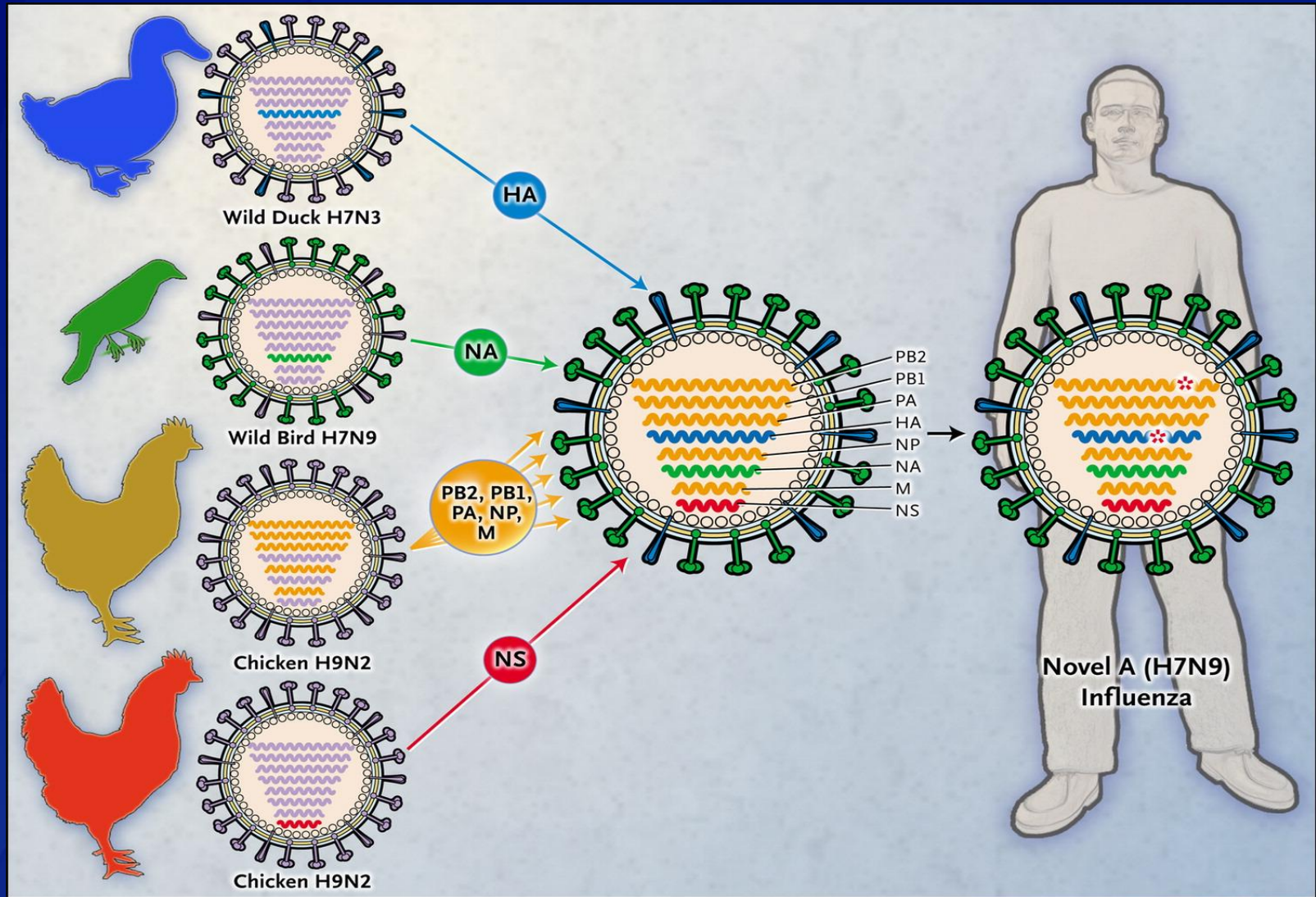
- ❑ Novel strain causing infections in China and Taiwan since March, 2013
- ❑ Like other Type A strains, birds are the reservoir
- ❑ Causes severe disease in those infected
- ❑ No sustained human to human transmission
- ❑ No cases in the United States
- ❑ Vaccine candidate strain is being developed
- ❑ Interim guidance on the use of detection of H7N9, and use of antiviral agents is posted on the CDC web site

www.cdc.gov/mmwr/preview/mmwrhtml/mm62e0501a1.htm?s_cid=mm62e0501a1_w
www.cdc.gov/flu/avianflu/h7n9-detecting-diagnostics.htm
www.cdc.gov/flu/avianflu/h7n9-antiviral-treatment.htm

<http://www.nejm.org/doi/full/10.1056/NEJMoa1304617?query=TOC>



Origin of the Novel Avian Influenza A H7N9 Virus.



Morens DM et al. N Engl J Med 2013;368:2345-2348.



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Pneumococcal polysaccharide (PPSV23) ⁹		1 or 2 doses					1 dose
Pneumococcal T3-valent conjugate (PCV13) ¹⁰		1 dose					
Meningococcal ^{11*}		1 or more doses					
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Varicella ^{1,5*}											
Human papillomavirus (HPV) Female ^{1,6*}											
Human papillomavirus (HPV) Male ^{1,6*}											
Zoster ⁶											
Measles, mumps, rubella (MMR) ^{7,8*}											
Pneumococcal polysaccharide (PPSV23) ⁹											
Pneumococcal T3-valent conjugate (PCV13) ¹⁰											
Meningococcal ^{11*}											
Hepatitis A ^{12*}											
Hepatitis B ^{13*}											

*Covered by the Vaccine Injury Compensation Program

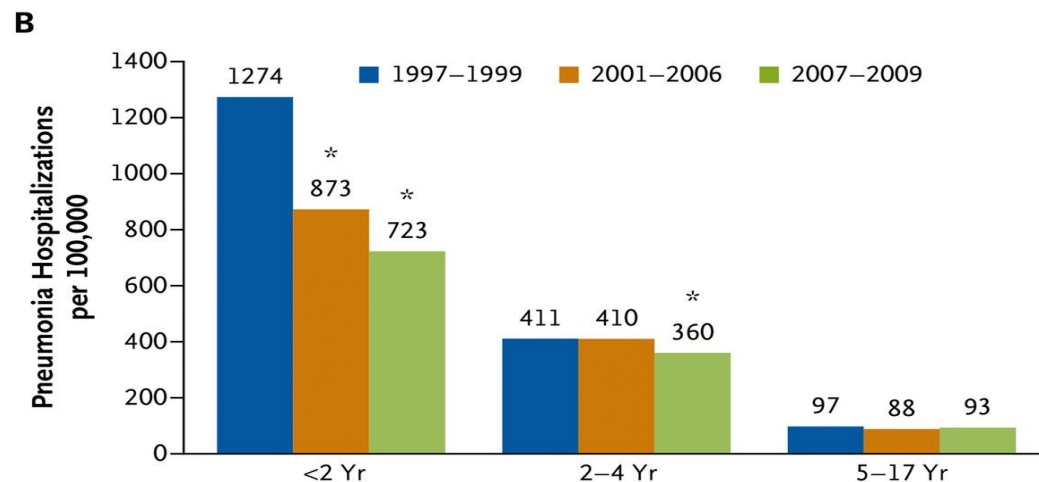
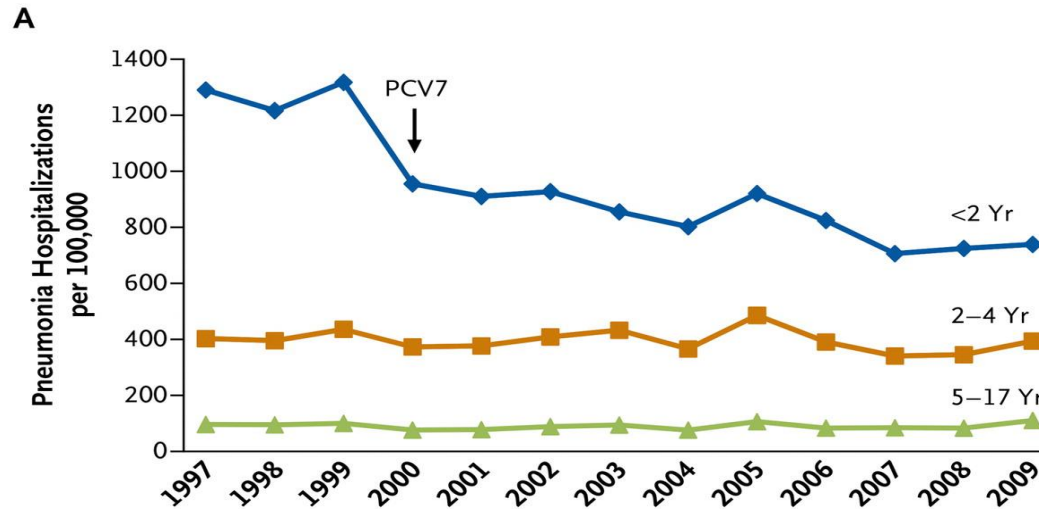
For all persons in this category who meet the age requirements and who lack documentation of vaccination or have no evidence of previous infection, zoster vaccine recommended regardless of prior episode of zoster

Recommended if some other risk factor is present (e.g., on the basis of medical, occupational, lifestyle, or other indications)

No recommendation

These schedules indicate the recommended age groups and medical indications for which administration of currently licensed vaccines is commonly indicated for adults ages 19 years and older, as of January 1, 2013. For all vaccines being recommended on the Adult Immunization Schedule, a vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Licensed combination vaccines may be used whenever any components of the combination are indicated and when the vaccine's other components are not contraindicated. For detailed recommendations on all vaccines, including those used primarily for travelers or that are issued during the year, consult the manufacturers' package inserts and the complete statements from the Advisory Committee on Immunization Practices (www.cdc.gov/vaccines/pubs/acip-list.htm). Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

Hospitalizations for Pneumonia among U.S. Children.

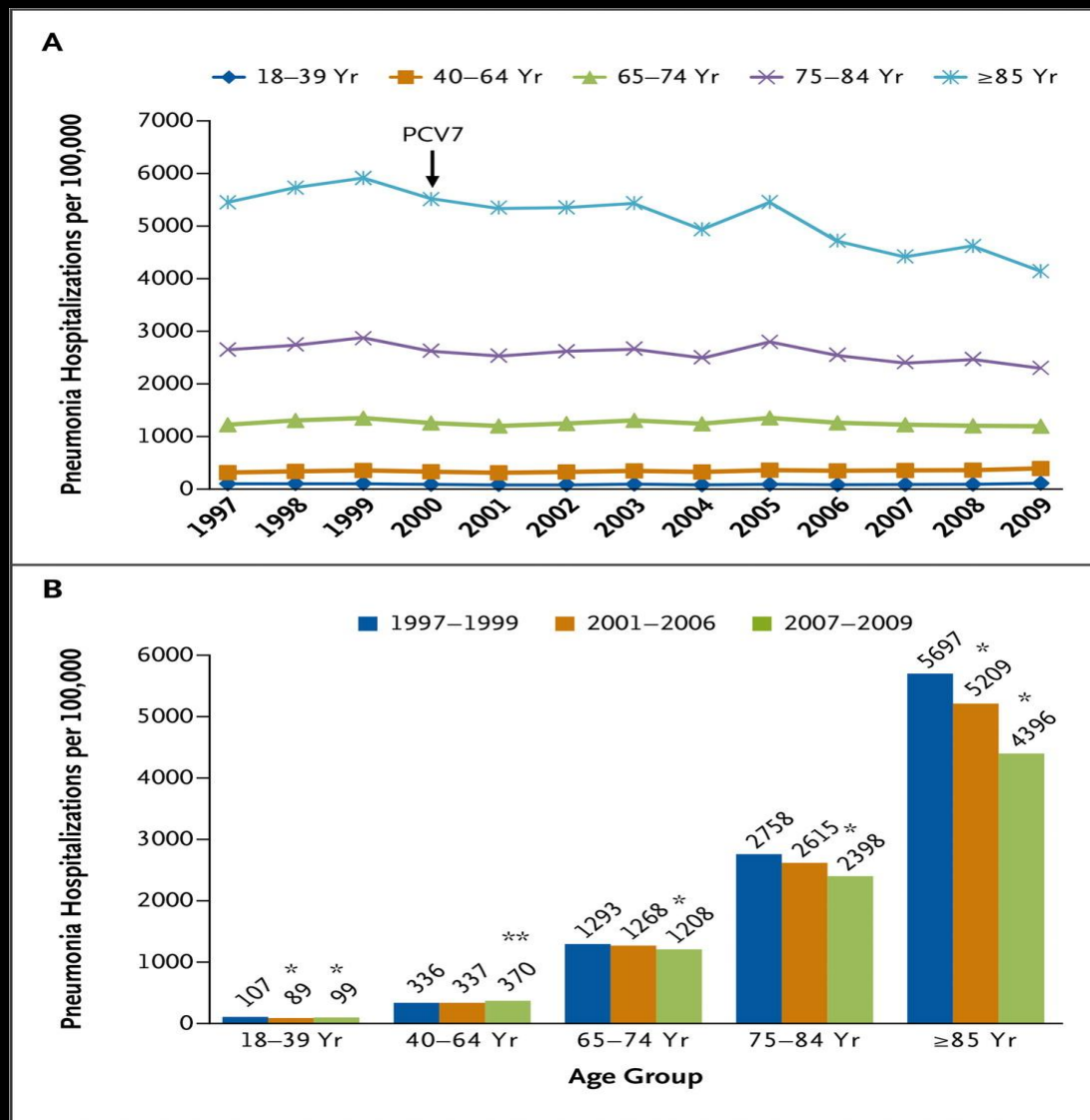


Griffin MR et al. N Engl J Med 2013;369:155-163.



The NEW ENGLAND
JOURNAL of MEDICINE

Hospitalizations for Pneumonia among U.S. Adults.



Griffin MR et al. N Engl J Med 2013;369:155-163.



The NEW ENGLAND
JOURNAL of MEDICINE

Risk Factors for Invasive Pneumococcal Disease

- Functional or anatomic asplenia
- Immunosuppression
- Renal disease
- CSF leak
- Cochlear implants
- Chronic Disease
- Cardiovascular
- Pulmonary (including asthma over 19 years of age)
- Metabolic
- Liver
- Alcoholism
- Cigarette smoking over 19 years of age
- Resident of nursing home

PCV13 Licensure

- PCV13 is approved by the Food and Drug Administration for:
 - adults 50 years of age and older
- ACIP recommended use of PCV13 for high risk persons 19 years and older (June 20, 2012)

Risk Factors for Invasive Pneumococcal Disease

- Functional or anatomic asplenia*
- Immunosuppression
- Renal disease
- CSF leak
- Cochlear implants
- Chronic Disease
- Cardiovascular
- Pulmonary (including asthma over 19 years of age)
- Metabolic
- Liver
- Alcoholism
- Cigarette smoking over 19 years of age
- Resident of nursing home

*These groups should receive one dose of PCV 13

Pneumococcal Polysaccharide Vaccine (PPSV 23)

- 60%-70% against invasive disease
- Less effective in preventing pneumococcal pneumonia

First-dose Recommendation for Pneumococcal Polysaccharide Vaccine

- Functional or anatomic asplenia
- Immunosuppression
- Renal disease
- CSF leak
- Cochlear implants
- Chronic Disease
- Cardiovascular
- Pulmonary (including asthma over 19 years of age)
- Metabolic
- Liver
- Alcoholism
- Cigarette smoking over 19 years of age
- Resident of nursing home

Five-year Revaccination for PPSV 23

- Functional or anatomic asplenia
- Immunosuppression
- Renal disease
- CSF leak
- Cochlear implants
- Chronic Disease
- Cardiovascular
- Pulmonary (including asthma over 19 years of age)
- Metabolic
- Liver
- Alcoholism
- Cigarette smoking over 19 years of age
- Resident of nursing home

PPSV 23 Candidates for Revaccination

- Persons vaccinated at <65 years of age, provided
 - they are 65 years or older, and
 - at least 5 years have passed since the last PPSV 23 vaccination

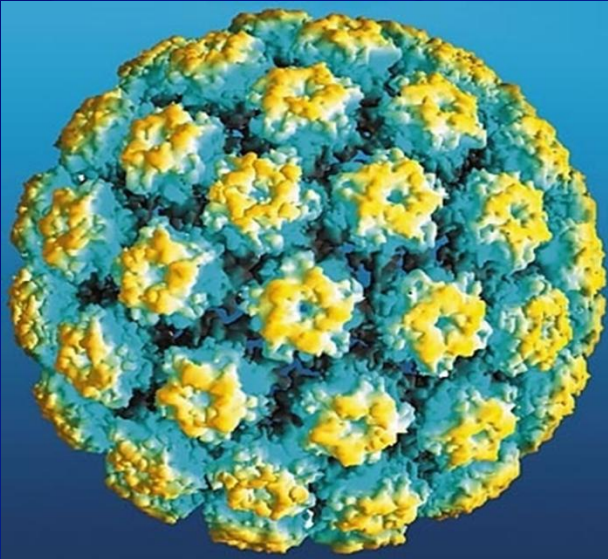
MMWR 1997;46(RR-8):1-24

Recommendations for use of PCV13 and PPSV23 in Pneumococcal Vaccine-Naïve Adults

- Adults 19 years and older with immunosuppression, functional or anatomic asplenia, CSF leak, or a cochlear implant who are vaccine naïve, should receive a single dose of PCV13 followed by a dose of PPSV23 at least 8 weeks later
- For those that require additional doses of PPSV23, a second dose of PPSV23 is recommended 5 years after the first dose of PPSV23

Recommendations for use of PCV13 in Adults Previously Vaccinated with PPSV23

- Adults with immunocompromising conditions, functional or anatomic asplenia, renal disease, CSF leak, or a cochlear implant previously vaccinated with PPSV23 should receive PCV13 one or more years after the last PPSV23 dose
- For those that require additional doses of PPSV23, the first dose should be administered no sooner than 8 weeks after PCV13 and at least 5 years after the most recent dose of PPSV23



HUMAN PAPILLOMAVIRUS VACCINES (HPV)

HPV Infections

- ❑ Approximately 79 million Americans are currently infected with HPV
- ❑ About 14 million people become newly infected each year
- ❑ HPV is so common that nearly all sexually active men and women get it at some point in their lives
- ❑ Highest prevalence in sexually active adolescents and young adults
- ❑ First infection occurs soon after onset of sexual activity*

*Partridge JM. J Infect Dis. 2007;196:1128-113

HPV Cancers in U.S. Each Year

- ❑ **Genital warts:** About 360,000 persons get genital warts
- ❑ **Cervical cancer:** About 12,000 women get cervical cancer

Other cancers that can be caused by HPV – estimated each year

- 2,100 vulvar cancers
- 500 vaginal cancers
- 600 penile cancer
- 2,800 anal cancers in women
- 1,500 anal cancers in men,
- 1,700 oropharyngeal cancers in women*
- 6,700 oropharyngeal cancers in men*

*Note: Other factors, notably tobacco and alcohol use, may also play a role with HPV to cause these cancers

About 21,000 of these cancers are potentially preventable by HPV vaccines

ACIP HPV Recommendations

- ❑ **2 products: HPV2 (Cervarix) and HPV4 (Gardasil)**
 - Approved for ages: 9 through 26 years
- ❑ **Both products are a 3 dose series**
- ❑ **Schedule*:**
 - Administer the 2nd dose 1-2 months after dose 1
 - Administer the 3rd dose 6 months (24 weeks) after dose 1 and at least 12 weeks after dose 2

*Off-label recommendation. MMWR; (59)20; 626-629

ACIP HPV Vaccination Recommendations

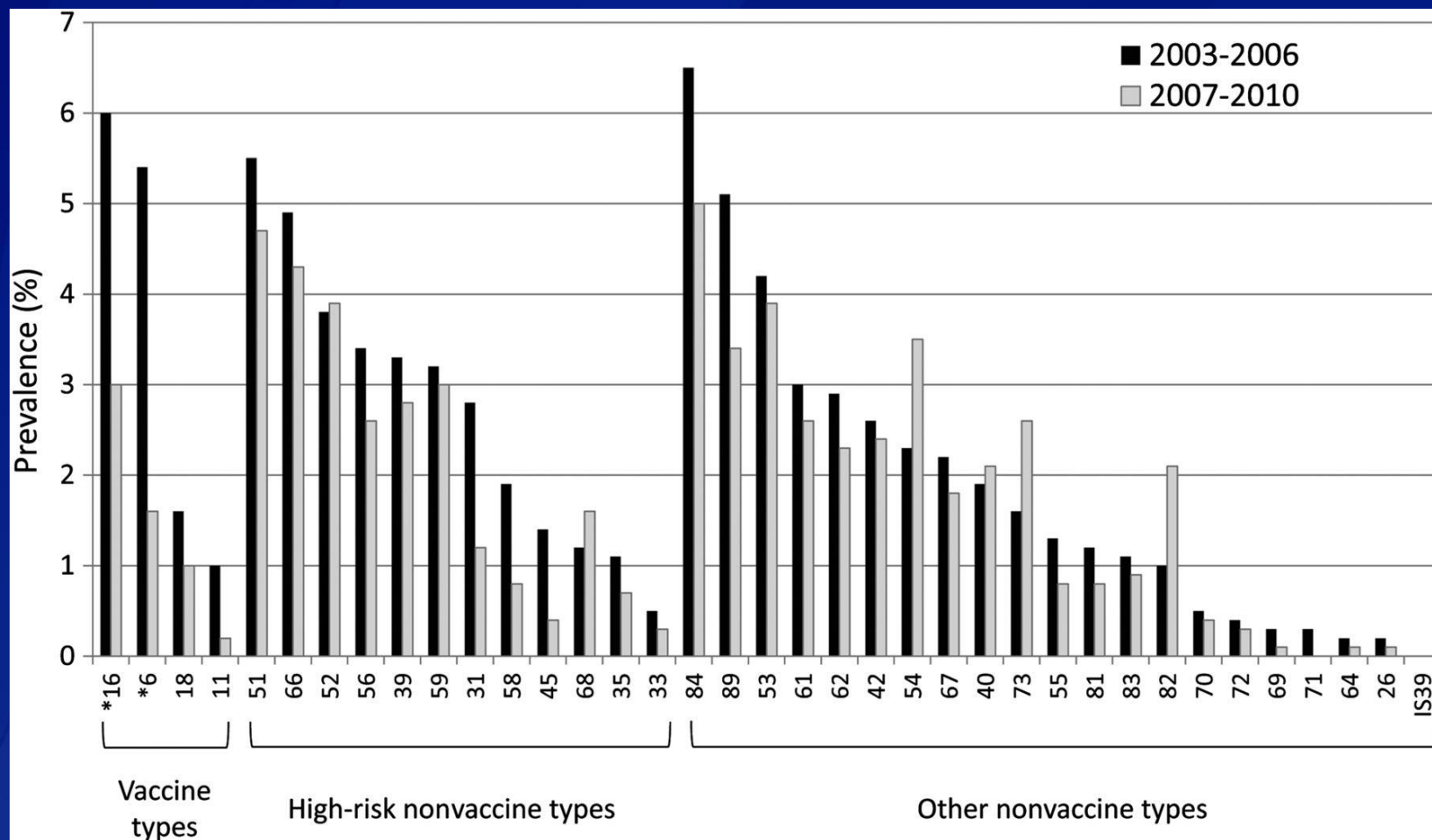
Males

- ❑ Routine: 11 or 12 years
- ❑ Catch-up:
 - ❑ 13-21 years All
 - ❑ 22 -26 years
 - ❑ HIV-infection
 - ❑ Immunocompromised
 - ❑ MSM
- ❑ Healthy men: 22 -26 years *may be* vaccinated
- ❑ Administer HPV4 only

Females

- ❑ Routine: 11 or 12 years
- ❑ Catch-up: 13 - 26 years
- ❑ Administer HPV4 or HPV2

Prevalence of individual human papillomavirus (HPV) types among females aged 14–19 years, 2003–2006 and 2007–2010.



Markowitz L E et al. J Infect Dis. 2013;infdis.jit192

Published by Oxford University Press on behalf of the
Infectious Diseases Society of America 2013.

The Journal of
Infectious Diseases

HPV Vaccine and Pregnancy

- Pregnancy is a precaution for HPV vaccine
- Providers should defer vaccination during pregnancy
- Pregnancy testing is not recommended
- If a dose is given during pregnancy, no intervention is needed
- Merck Pregnancy Registry for Gardasil® (6/1/2006 – 5/31/2012) terminated with no significant adverse associations with vaccination

Strategies for Increasing HPV Vaccination Rates in Clinical Practices

- ❑ **Recommend HPV vaccine!**
 - Include HPV vaccine when discussing other needed vaccines
- ❑ **Integrate standard procedures supporting vaccination**
 - Assess for needed vaccines at every clinical encounter
 - Immunize at every opportunity
 - Standing orders
- ❑ **Reminder and recall**
- ❑ **AFIX: assessment, feedback, incentive, and eXchange**
- ❑ **NEW! HEDIS measure (Jan 2012)**
 - Proportion of 13 year old girls who have not received 3 doses

Tools for improving uptake of HPV: www.cdc.gov/vaccines/teens

Shingles (Herpes Zoster) Vaccine



Zoster

- Generally associated with normal aging and with anything that causes reduced immunocompetence
- Lifetime risk of 30% in the United States
- Estimated 500,000- 1 million cases of zoster diagnosed annually in the U.S

Zoster Vaccine

- Recommended for persons 60 years old and older
- Indicated for persons with current varicella immunity based on disease
- Indicated regardless of a history of zoster
- One dose, 0.6 cc subcutaneous injection

Zoster Vaccine Effectiveness

- Shingles Prevention Study
- Enrolled 38,546 ≥ 60 year olds
- Effective in prevention of herpes zoster:
 - 51% preventing incidence of zoster
 - 61% preventing illness from zoster
 - 66% preventing post-herpetic neuralgia

Zoster: Complications

- Post-herpetic neuralgia
- Pain that lasts after rash clears, sometime up to a year
- Occurs in 20 percent of shingles cases
- Highest risk in persons older than 60 years

Zoster Vaccine

- Now licensed for adults 50-59 years of age
- Routine vaccination of adults younger than 60 years NOT recommended
- Had had reduced supply, now improved
- Burden of complications highest in persons older than 60 years

Zoster and Pneumococcal Polysaccharide (PPSV) Vaccines

- Zoster package insert states consider zoster and PPSV should not be administered concurrently
- Based on one study documenting titer against VZV was lower in persons who received zoster and PPSV23 at same visit, compared to persons who received these vaccines 4 weeks apart
- Recently published study* has shown concurrent administration of zoster and PPSV23 does not effect zoster vaccine efficacy

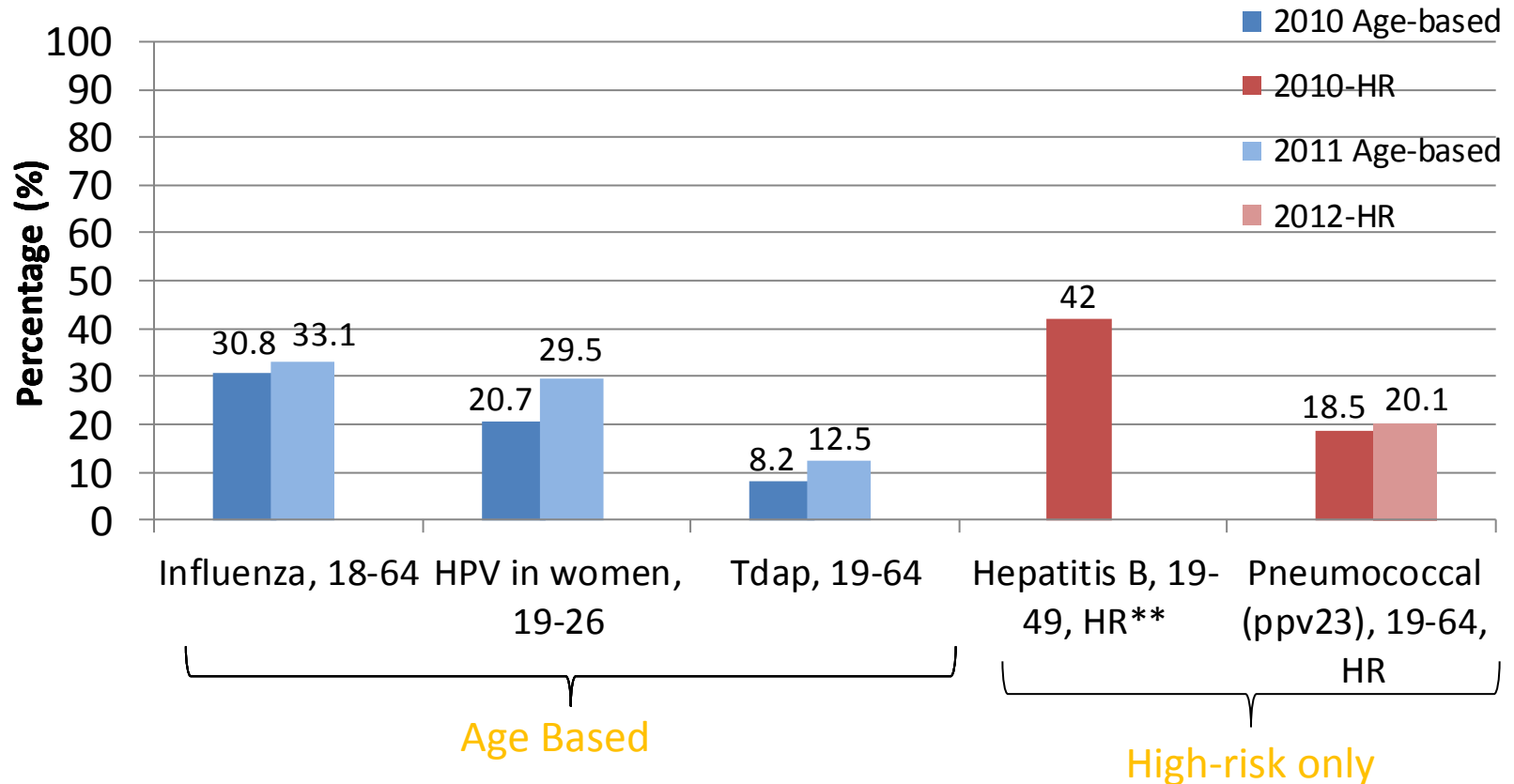
*Tseng et al. Vaccine 2011; 29:3628-32

Zoster and Pneumococcal Polysaccharide (PPSV) Vaccines

- CDC has not changed its recommendation for either vaccine
- Administer zoster and PPSV at the same visit if the person is eligible for both vaccines

Vaccine Coverage among Adults: “Miles to go before we sleep”

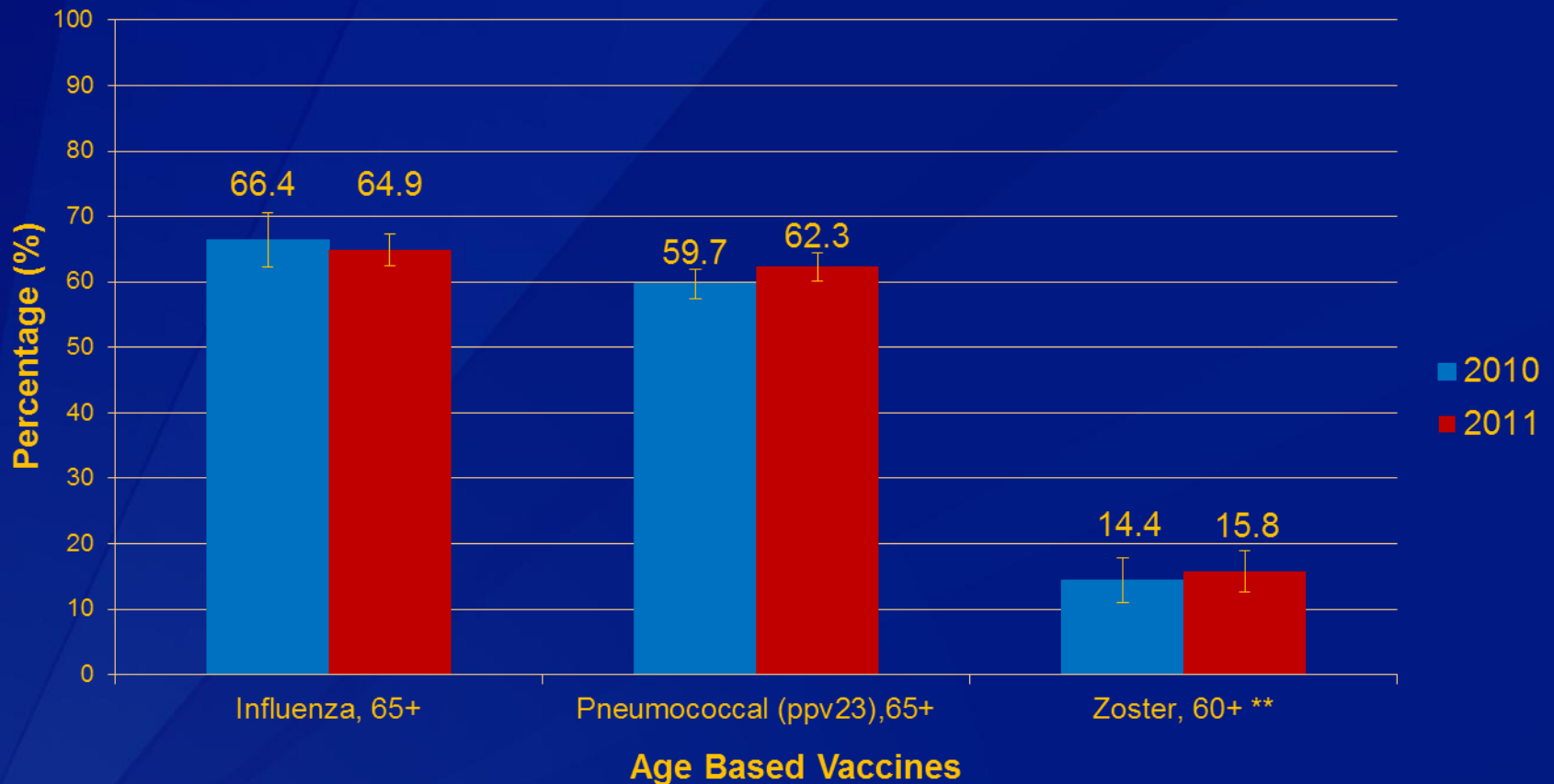
Vaccination coverage for target groups by vaccine, age, and high-risk status, NHIS 2010* and 2011



*Data source: 2010 National Health Interview Survey. CDC. Adults Vaccination Coverage — United States, 2010. MMWR 2012; 61(04):66-72. and NHIS 2011 – Non-influenza vaccine coverage among adults – United States, 2011. MMWR 2013;62:66-72.

**Hepatitis B, 19-49 HR data not collected in 2011

Vaccination coverage for target groups by vaccine, age, and high-risk status, NHIS 2010* and 2011



*Data source: 2010 National Health Interview Survey. CDC. Adult Vaccination Coverage — United States, 2010. MMWR 2012; 61(04);66-72.

** Statistically higher than 2010 coverage rates

Race/ Ethnicity Disparity in Pneumococcal Vaccination Coverage

Vaccine	2011 Coverage %	% Point Difference from 2010	HealthyPeople 2020
Pneumococcal (ppv23) (65+)	62.3	+2.6	90%
-white	66.5	+3.0	90%
-black	47.6	+.8	90%
-Hispanic	43.1	+4.2	90%
-Asian	40.3	-7.9	90%

Childhood Vaccination Program

- ❑ Major success of Vaccines for Children (VFC) Program
 - few cases of VPD in children
 - highly effective vaccines
 - vaccine coverage levels, generally $\geq 90\%$
 - benefits adults as well
 - vaccine requirements for school entry ensure high coverage
 - medical home model for children
 - nearly all vaccines are cost saving
- ❑ VFC plus 317 program – few adult public health resources
 - vaccine for uninsured and underinsured children
 - vaccine program infrastructure
 - 2012 vaccine purchases on federal contracts
 - pediatric ~\$3.9 billion
 - *adult vaccine purchases: ~\$45 million (317 only)*

Barriers to Adult Immunization

- ❑ **Competing social and economic demands among adults**
- ❑ **Competing demands for providers' time and vaccines often not integrated into adult medical care practice**
- ❑ **Adult vaccine schedule is complex**
 - Especially for certain occupational and medical target groups
- ❑ **Limited patient awareness and demand for adult vaccinations except for influenza vaccine**
- ❑ **Complex payment/coverage for adult vaccines even among the insured**
- ❑ **Multiple sources for vaccines and vaccine documentation**

Adult Vaccination Opportunities

❑ 317 Program

- Requirement to address lagging coverage among children, adolescents AND adults
- States can order vaccines for uninsured or underinsured adults off federal contract

❑ Increasing state coverage data to be come available for adults through BRFSS

- Influenza and pneumococcal vaccine every year
- Questions on Tdap, zoster, and place of influenza vaccination to be rotated every 3rd year starting in 2013

❑ Increased access to vaccines at work, retail locations, pharmacies

❑ Increasing ability of health departments to bill for vaccinations

- Especially important for providers to refer patients for vaccines they don't stock

❑ Increasing interest in adult immunizations from private and public sectors

ACA and Clinical Preventive Services

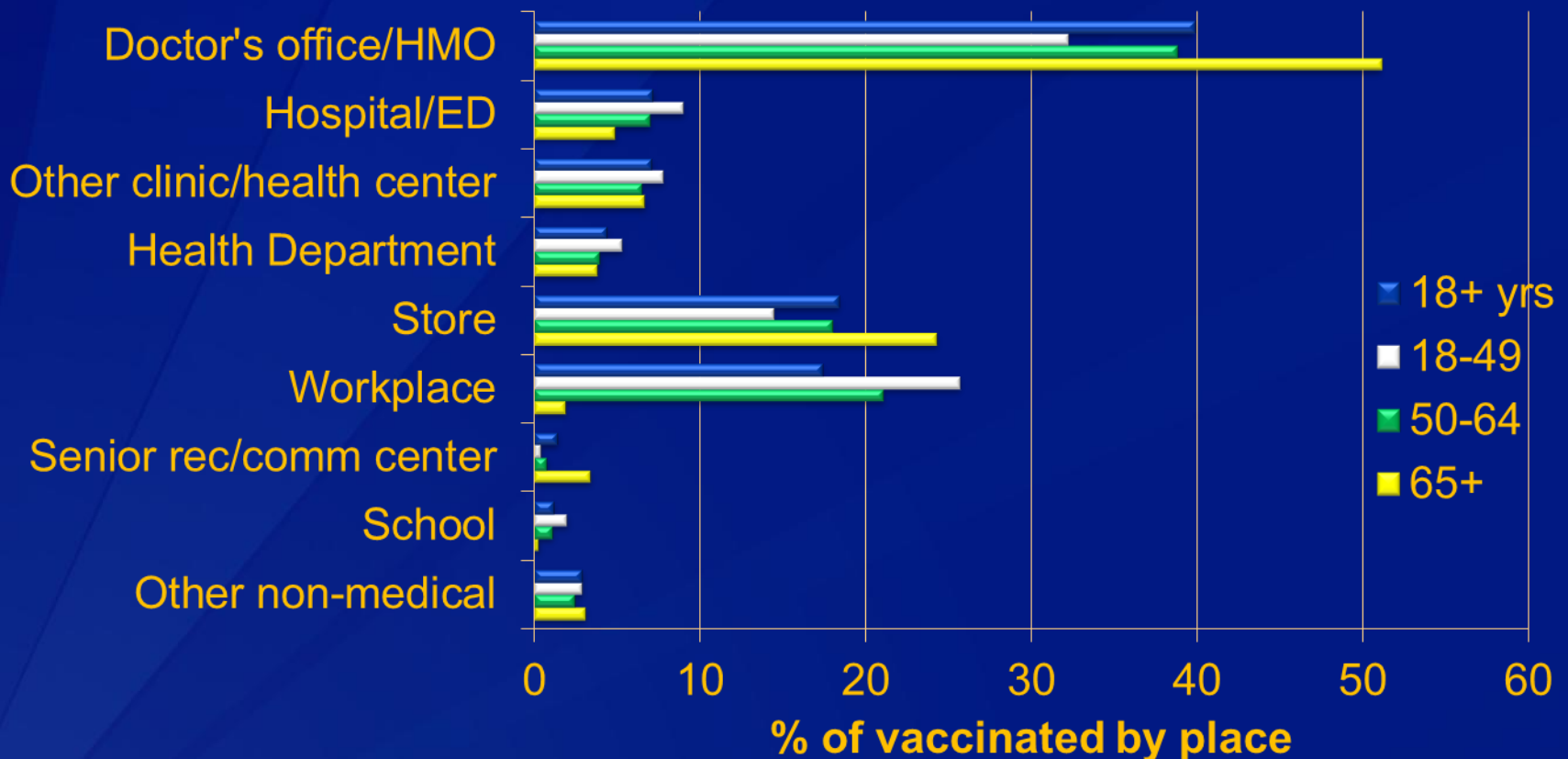
- ❑ **Under the ACA, non-grandfathered private health plans must provide coverage for a range of preventive services without cost-sharing**
 - those services rated as “A” (strongly recommended) and “B” (recommended) by the U.S. Preventive Services Task Force,
 - vaccinations recommended by ACIP,
 - services recommended under the Bright Futures guidelines developed by HRSA and the American Academy of Pediatrics for children from birth to age 21, and
 - women’s preventive services recommended by HRSA based on an Institute of Medicine study committee

Adult Vaccination Opportunities

- ❑ **80% of adults with insurance coverage**
- ❑ **Medicare Part B includes coverage of some vaccines for adults**
 - Influenza and pneumococcal vaccine
 - Hepatitis B for high risk
 - Td as part of wound care management
- ❑ **Medicare Part D – covers other vaccines**
 - Out of pocket costs, etc. vary by Part D and Part C program

Place of Influenza Vaccination Among Adults – United States, 2010-11 Season, BRFSS Survey

MMWR June 17, 2011



The United States National Influenza Vaccine Summit is...

- A partnership of more than 140 organizational stakeholders, both private and public, in influenza vaccine research, production, distribution, administration, and advocacy
- All committed to achieving the Healthy People 2020 goals for influenza vaccination
- Started in 2000 in response to problems with influenza vaccine supply

Members of the Summit include...

- Vaccine Manufacturers
- Vaccine Distributors
- Federal Agencies
- Professional Medical Organizations
 - Specialty
 - State
- Nursing Organizations
- Public Health
- Hospitals

Members of the Summit include...

- Pharmacists
- Community Immunization Providers
- Occupational Health Providers
- Business/Employers
- Private Health Insurance and Managed Care
- Long-term Care
- Quality Improvement Organizations
- Consumers
- Advocacy Groups

Summit Creates United Influenza Vaccination Goals

- The remarkable breadth of participants in the Summit provides a 360-degree view of all the moving parts associated with influenza immunization
- Summit provides continual opportunity for all partners to “get on the same page” with respect to influenza immunization in the United States.

The Summit Trust Relationship...

- Through the development of understanding, trust and transparency in the influenza enterprise, the Summit
 - Provides partners with a safe environment to raise issues/problems and discuss potential solutions honestly.
 - Provides opportunities to share, learn and understand each others' perspectives and ideas
 - Provides opportunities to leverage all partners to respond to national questions about influenza vaccination
 - Last year's supply survey
 - Influenza Vaccine Availability Tracking System (IVATS):
 - Helps healthcare providers and vaccine suppliers match vaccine supply with need (<http://www.preventinfluenza.org/ivats/>)

The National Adult Immunization Summit

- Formed 2012 to build upon the strategies and successes of the National Influenza Vaccine Summit
- Built upon the work and effort from many others, including ideas from the 2007 and 2010 National Immunization Congresses, to focus on action to lead to change that will increase adult immunization rates

The National Adult and Influenza Immunization Summit

- Ideally, both Summits will evolve into one entity dealing with all adult vaccines, including influenza
- A complete merger would pending until some pressing issues remaining in influenza are dealt with, such as quadrivalent vaccine use
- Influenza will likely remain unique for the Summit in order to maintain Summit effort in the pediatric population for influenza
- Opportunity for the Summit to evolve to reflect ALL providers of adult immunizations

The National Adult and Influenza Immunization Summit

- New Memorandum of Understanding developed and signed in advance of 2nd meeting of National Adult and Influenza Immunization Summit (NAIIS) in Atlanta, May 2013
- The Summit is organized by the IAC, CDC, and NVPO, with strong support from the Summit Organizing Committee and the Summit Advisory Group
- The Summit's work is done primarily through its five working groups
 - Provider Education
 - Patient Education
 - Performance Measurement
 - Expanding Collaboration and Increasing Access
 - Informing Decision-Makers

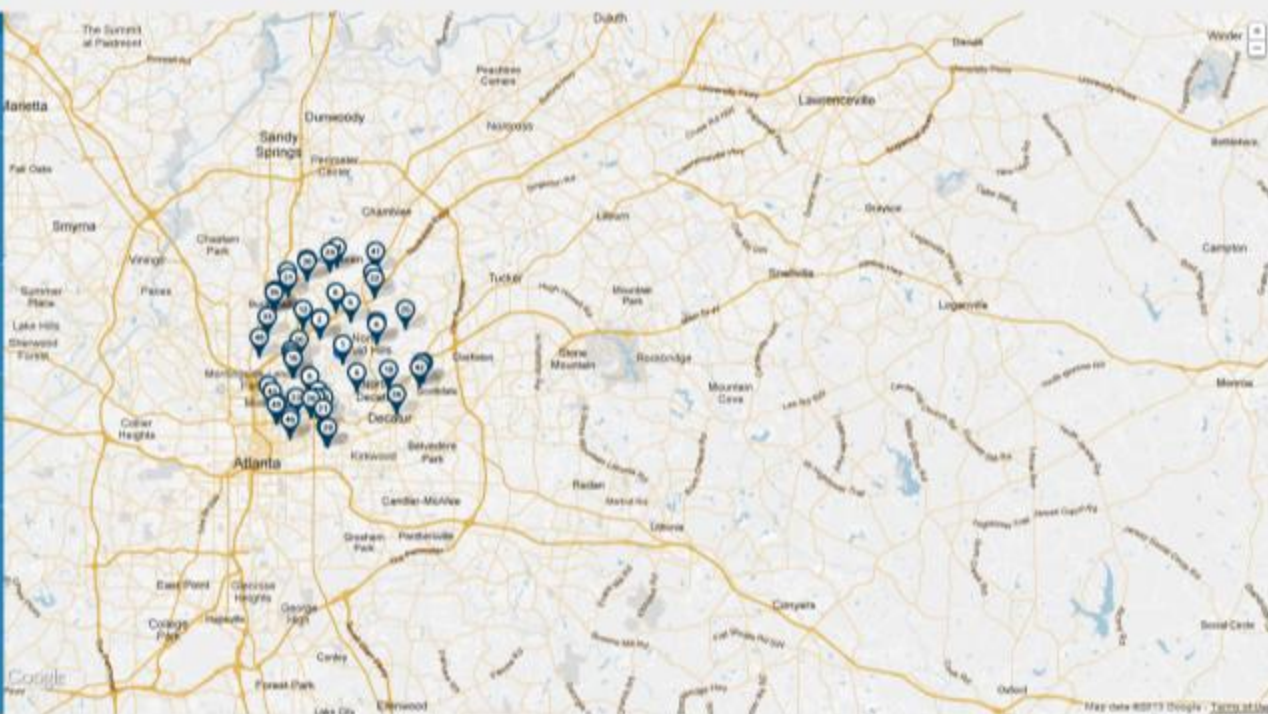
http://vaccine.healthmap.org



HealthMap Vaccine Finder

about

- 1 Rite Aid #11789
1799 Briarcliff Road
Atlanta, GA 30306
(404) 873-3438
- 2 Publix Pharmacy 1044
2325 Cheshire Bridge Rd.
Ne
Atlanta, GA 30324
(404) 638-1905
- 3 CVS/Pharmacy Store #2186
2350 Cheshire Bridge Road
Atlanta, GA 30324
(404) 486-7269
- 4 CVS/Pharmacy Store #4720
1554 North Decatur Road
Emory Village
Atlanta, GA 30307
(404) 373-4534



Find Vaccines Near You

Showing availability within 15 miles of:
Atlanta, GA 30333, USA

Enter a new address or zipcode

Show flu vaccines

- ☒ Flu Shot
- ☒ Intradermal Shot
- ☒ Nasal Spray
- ☒ High-Dose Shot

Show adult vaccines

- ☒ Hepatitis A
- ☒ Hepatitis B
- ☒ HPV
- ☒ MMR
- ☒ Zoster
- ☒ Tdap
- ☒ Td
- ☒ Meningococcal
- ☒ Pneumococcal
- ☒ Varicella

Show related HealthMap alerts

You can also contact your physician for vaccination

What Vaccines
Do I Need?

Report & See Flu
Vaccine Shortages

Powered by in partnership with vaccines.gov FLU.gov NHS.gov

Track outbreaks on [HealthMap](#). Improve flu surveillance at [Flu Near You](#). Report adverse events to [MedWatch](#).

Add the [Vaccine Finder widget](#) to your website. Join the low volume [Vaccine Finder mailing list](#).

Showing availability for 49,100 locations

Resources for Adult Immunization

Patient Name _____
 Date _____
 Vaccines recommended for you:
☐ Influenza
 ☐ Live nasal
 ☐ Standard dose, inactivated
 ☐ High dose, inactivated
 ☐ Intradermal
☐ Meningococcal
☐ MMR
☐ Pneumococcal polysaccharide (PPSV23)
☐ Pneumococcal 13-valent conjugate (PCV13)
☐ Tdap (Td plus pertussis, "whooping cough")
☐ Td (tetanus and diphtheria only)
☐ Zoster (shingles)
☐ Hepatitis A
☐ Hepatitis B
☐ Combination Hepatitis A and B vaccine
☐ HPV (Human papilloma virus)
☐ Other Vaccine: _____
 Healthcare provider signature _____
 230606-A

What You Need To Know About Heart Disease and Vaccines

The CDC wants you to know that vaccines are an important part of managing your heart disease. Certain diseases that can be very serious for people with heart disease can be prevented by vaccines. Staying up to date with vaccines is part of ensuring a healthy heart.

People with heart disease should get:

- ☐ Influenza "flu shot" vaccine each year
- ☐ Pneumococcal "pneumonia" vaccine
- ☐ Zoster "shingles" vaccine*
- ☐ Vaccine to prevent whooping cough and tetanus (Tdap)



Your doctor, pharmacist or other healthcare provider may recommend other vaccines based on your age, vaccines you have had, and other considerations. Take charge of your health. Talk to your healthcare provider about including vaccines as part of your heart health.

*for adults 60 years and older

What You Need To Know About Pregnancy and Vaccines

The CDC wants you to know that vaccines are an important part of a healthy pregnancy. Certain diseases that can be very serious for pregnant women and their newborn babies can be prevented by vaccines. Staying up to date with vaccines is part of a healthy pregnancy.

Pregnant women should get:

- ☐ Influenza "flu shot" vaccine
- ☐ Vaccine to prevent whooping cough and tetanus (Tdap)



Vaccines help protect you. Vaccines also help protect your baby during the time when he or she is too young to get vaccinated but is at high risk of severe disease from flu and whooping cough. Your doctor, pharmacist or other healthcare provider may recommend other vaccines either before, during or after your pregnancy based on your age or other considerations. Talk to your healthcare provider about including vaccines as part of a healthy pregnancy.

What You Need To Know About Diabetes and Vaccines

The CDC wants you to know that vaccines are an important part of managing your type 1 or type 2 diabetes. Certain diseases that can be very serious for people with diabetes can be prevented by vaccines. Staying up to date with vaccines is part of your regular diabetes management.

People with type 1 or type 2 diabetes should get:

- ☐ Influenza "flu shot" vaccine each year
- ☐ Pneumococcal "pneumonia" vaccine
- ☐ Hepatitis B vaccine series
- ☐ Zoster "shingles" vaccine*
- ☐ Vaccine to prevent whooping cough and tetanus (Tdap)



Your doctor, pharmacist or other healthcare provider may recommend other vaccines based on your age, vaccines you have had, and other considerations. Take charge of your health. Talk to your healthcare provider about including vaccines as part of your diabetes management.

*for adults 60 years and older



<http://www.cdc.gov/vaccines/hcp/patient-ed/adults/index.html>

<http://www.preventinfluenza.org>

Stay Up to Date

- ❑ Visit accurate websites:
 - CDC www.cdc.gov/vaccines
 - American Academy of Pediatrics www.aap.org and www.2.aap.org/immunization
 - American Academy of Family Physicians www.aafp.org
 - Immunization Action Coalition www.immunize.org
 - Children's Hospital of Philadelphia Vaccine Education Center <http://www.chop.edu/service/vaccine-education-center/home.html>
 - Sign up for email alerts, listservs if possible
- ❑ Subscribe to CDC's *MMWR* www.cdc.gov/mmwr
- ❑ Find additional resources from your state or local health department immunization program

CDC Vaccines and Immunization Contact Information

- ☐ Telephone** **800.CDC.INFO**
(for patients and parents)
- ☐ Email** **nipinfo@cdc.gov**
(for providers)
- ☐ Website** **www.cdc.gov/vaccines/**
- ☐ Vaccine Safety** **www.cdc.gov/vaccinesafety/**

Thank You!